

Unit for Medical Statistics

HOW TO PREPARE BEFORE SEEKING HELP WITH SAMPLE SIZE CALCULATIONS

Key things to do or find out beforehand

- Be able to state the main question in terms of data (variables) that will be measured or collected. What is the main (primary) outcome, and what are then secondary outcomes?
- What is the study design?
- What is the degree of precision required or the size of difference that is anticipated for comparative studies ('clinically important difference')
- Know something about the nature of the data
eg for measurements, what is the shape of the distribution and how does it vary between individuals (standard deviation)
eg for proportions, approximately what size of proportion is expected – is it very small or close to 0.5 (50%)?
- Are there serial (repeated) measures on subjects?
- What analysis is planned? Is it unifactorial like a t test or chi-square test or is some sort of regression planned?
- Are there any known constraints on the sample size – such as a maximum number of subjects available or maximum number feasible in a given time-frame?